

Title (en)

Methods of using and compositions comprising PDE4-modulators for treatment, prevention and management of tuberculosis

Title (de)

Verfahren zur Verwendung von und Zusammensetzungen mit PDE4-Modulatoren zur Behandlung, Vorbeugung und Handhabung von Tuberkulose

Title (fr)

Procédés d'utilisation et compositions comprenant des modulateurs de PDE4 pour le traitement, la prévention et la gestion de la tuberculose

Publication

EP 2818164 A1 20141231 (EN)

Application

EP 14170043 A 20100209

Priority

- US 15146709 P 20090210
- EP 10704460 A 20100209

Abstract (en)

The present invention concerns a PDE4 modulator for use in a method of treating, preventing, or managing tuberculosis, the method comprising administering to a subject a PDE4 modulator, or a pharmaceutically acceptable salt, solvate, or stereoisomer thereof, in combination with an anti-tuberculosis agent.

IPC 8 full level

A61K 31/33 (2006.01); **A61K 31/40** (2006.01); **A61K 31/4035** (2006.01); **A61K 31/42** (2006.01); **A61K 31/44** (2006.01); **A61K 31/4409** (2006.01); **A61K 31/495** (2006.01); **A61K 31/496** (2006.01); **A61K 31/70** (2006.01); **A61P 31/06** (2006.01)

CPC (source: EP KR US)

A61K 31/33 (2013.01 - EP KR US); **A61K 31/40** (2013.01 - EP KR US); **A61K 31/4035** (2013.01 - EP KR US); **A61K 31/42** (2013.01 - EP KR US); **A61K 31/44** (2013.01 - EP KR US); **A61K 31/4409** (2013.01 - EP KR US); **A61K 31/495** (2013.01 - EP KR US); **A61K 31/496** (2013.01 - EP KR US); **A61K 31/70** (2013.01 - EP KR US); **A61K 45/06** (2013.01 - EP KR US); **A61P 31/06** (2017.12 - EP); **A61P 43/00** (2017.12 - EP); **A61K 2121/00** (2013.01 - KR); **Y02A 50/30** (2017.12 - EP US)

Citation (applicant)

- US 5605914 A 19970225 - MULLER GEORGE W [US]
- US 5463063 A 19951031 - MULLER GEORGE W [US]
- US 5728844 A 19980317 - MULLER GEORGE W [US], et al
- US 5728845 A 19980317 - MULLER GEORGE W [US], et al
- US 5968945 A 19991019 - MULLER GEORGE W [US], et al
- US 6180644 B1 20010130 - MULLER GEORGE W [US], et al
- US 6518281 B2 20030211 - MULLER GEORGE W [US], et al
- US 5801195 A 19980901 - MULLER GEORGE W [US], et al
- US 5736570 A 19980407 - MULLER GEORGE W [US], et al
- US 6046221 A 20000404 - MULLER GEORGE W [US], et al
- US 6284780 B1 20010904 - MULLER GEORGE W [US], et al
- US 5703098 A 19971230 - MULLER GEORGE W [US], et al
- US 5658940 A 19970819 - MULLER GEORGE W [US], et al
- US 6214857 B1 20010410 - MULLER GEORGE W [US], et al
- WO 9906041 A1 19990211 - CELGENE CORP [US], et al
- US 6011050 A 20000104 - MULLER GEORGE W [US], et al
- US 6020358 A 20000201 - MULLER GEORGE W [US], et al
- US 7173058 B2 20070206 - MULLER GEORGE W [US], et al
- US 6429221 B1 20020806 - MULLER GEORGE W [US], et al
- US 6326388 B1 20011204 - MAN HON-WAH [US], et al
- US 5929117 A 19990727 - MULLER GEORGE W [US], et al
- US 6130226 A 20001010 - MULLER GEORGE W [US], et al
- US 6262101 B1 20010717 - MULLER GEORGE W [US], et al
- US 6479554 B2 20021112 - MULLER GEORGE W [US], et al
- WO 0134606 A1 20010517 - CELGENE CORP [US], et al
- US 6667316 B1 20031223 - MAN HON-WAH [US], et al
- WO 0145702 A1 20010628 - CELGENE CORP [US], et al
- US 6699899 B1 20040302 - MAN HON-WAH [US], et al
- US 7312241 B2 20071225 - MULLER GEORGE W [US], et al
- US 2006025457 A1 20060202 - MULLER GEORGE W [US], et al
- US 7244759 B2 20070717 - MULLER GEORGE W [US], et al
- WO 03080049 A1 20031002 - CELGENE CORP [US], et al
- US 5698579 A 19971216 - MULLER GEORGE W [US]
- US 5877200 A 19990302 - MULLER GEORGE W [US]
- US 6075041 A 20000613 - MULLER GEORGE W [US]
- US 6200987 B1 20010313 - MULLER GEORGE W [US]
- WO 9501348 A2 19950112 - CELGENE CORP [US], et al
- US 6962940 B2 20051108 - MULLER GEORGE W [US], et al
- WO 03080048 A1 20031002 - CELGENE CORP [US], et al
- WO 03080049 A1 20031002 - CELGENE CORP [US], et al
- US 2004167199 A1 20040826 - MULLER GEORGE W [US], et al
- WO 9708143 A1 19970306 - CELGENE CORP [US], et al
- WO 9723457 A1 19970703 - CELGENE CORP [US], et al
- WO 0145702 A1 20010628 - CELGENE CORP [US], et al
- US 7034052 B2 20060425 - MAN HON-WAH [US], et al
- US 7244259 B2 20070717 - SMITH DANIEL J [US], et al
- US 6911464 B2 20050628 - MAN HON-WAH [US], et al
- US 3845770 A 19741105 - THEEUWES F, et al

- US 3916899 A 19751104 - THEEUWES FELIX, et al
- US 3536809 A 19701027 - APPELZWEIG NORMAN
- US 3598123 A 19710810 - ZAFFARONI ALEJANDRO
- US 4008719 A 19770222 - THEEUWES FELIX, et al
- US 5674533 A 19971007 - SANTUS GIANCARLO [IT], et al
- US 5059595 A 19911022 - LE GRAZIE CRISTINA [IT]
- US 5591767 A 19970107 - MOHR JUDY M [US], et al
- US 5120548 A 19920609 - MCCLELLAND GREGORY A [US], et al
- US 5073543 A 19911217 - MARSHALL LUCIA G I [US], et al
- US 5639476 A 19970617 - OSHLACK BENJAMIN [US], et al
- US 5354556 A 19941011 - SPARKS RANDALL T [US], et al
- US 5733566 A 19980331 - LEWIS DANNY H [US]
- US 5134127 A 19920728 - STELLA VALENTINO [US], et al
- L.G. CORRAL ET AL., J. IMMUNOL., vol. 163, 1999, pages 380 - 386
- MANFRED E. WOLFF ED.: "Burger's Medicinal Chemistry and Drug Discovery.", 5th ed., vol. 172-178, 1995, pages: 949 - 982
- H. BUNDGAARD: "Design of Prodrugs", 1985, ELSELVIER
- "Physicians' Desk Reference 57th ed.", 2003, pages: 594 - 597
- U.S. PHARMACOPEIA (USP, 2002
- JENS T. CARSTENSEN: "Drug Stability: Principles & Practice, 2d. Ed.", 1995, MARCEL DEKKER, pages: 379 - 80
- "Remington's Pharmaceutical Sciences, 18th ed.", 1990, MACK PUBLISHING
- "Remington's Pharmaceutical Sciences, 16th ed.", 1980, MACK PUBLISHING
- "Introduction to Pharmaceutical Dosage Forms, 4th ed.", 1985, LEA & FEBIGER

Citation (search report)

- [IY] WO 2007108750 A1 20070927 - ASTRAZENECA AB [SE], et al
- [Y] WO 03080049 A1 20031002 - CELGENE CORP [US], et al
- [Y] WO 0145702 A1 20010628 - CELGENE CORP [US], et al
- [Y] WO 2004043378 A2 20040527 - CELGENE CORP [US], et al
- [Y] WO 0211728 A2 20020214 - PANACEA BIOTEC LTD [IN], et al
- [YD] WO 9501348 A2 19950112 - CELGENE CORP [US], et al
- [YD] WO 9906041 A1 19990211 - CELGENE CORP [US], et al
- [YD] US 6011050 A 20000104 - MULLER GEORGE W [US], et al
- [Y] MARRIOTT J B ET AL: "CC-3052: a water-soluble analog of thalidomide and potent inhibitor of activation-induced TNF-alpha production.", JOURNAL OF IMMUNOLOGY (BALTIMORE, MD. : 1950) 15 OCT 1998 LNKD- PUBMED:9780198, vol. 161, no. 8, 15 October 1998 (1998-10-15), pages 4236 - 4243, XP002577505, ISSN: 0022-1767

Cited by

US10682336B2; WO2017070291A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2010093588 A1 20100819; AP 2011005849 A0 20110831; AP 3437 A 20151031; AU 2010213936 A1 20110811; AU 2010213936 B2 20140731; BR PI1007500 A2 20160216; CA 2750123 A1 20100819; CN 102387798 A 20120321; CO 6410289 A2 20120330; CR 20110411 A 20120106; EA 201171035 A1 20120228; EC SP11011295 A 20110930; EP 2395995 A1 20111221; EP 2818164 A1 20141231; HK 1205681 A1 20151224; IL 214176 A0 20110831; IL 214176 A 20160929; JP 2012517441 A 20120802; JP 2015164928 A 20150917; KR 20110116049 A 20111024; MX 2011008132 A 20110906; MY 160002 A 20170215; NI 201100154 A 20120124; NZ 594193 A 20130927; PE 20120580 A1 20120523; PE 20151143 A1 20150807; SG 10201402158V A 20140730; SG 173149 A1 20110829; UA 103791 C2 20131125; US 2012149716 A1 20120614

DOCDB simple family (application)

US 2010023533 W 20100209; AP 2011005849 A 20100209; AU 2010213936 A 20100209; BR PI1007500 A 20100209; CA 2750123 A 20100209; CN 201080015921 A 20100209; CO 11116668 A 20110909; CR 20110411 A 20110729; EA 201171035 A 20100209; EC SP11011295 A 20110821; EP 10704460 A 20100209; EP 14170043 A 20100209; HK 15106201 A 20150630; IL 21417611 A 20110719; JP 2011549315 A 20100209; JP 2015081559 A 20150413; KR 20117021146 A 20100209; MX 2011008132 A 20100209; MY PI2011003673 A 20100209; NI 201100154 A 20110809; NZ 59419310 A 20100209; PE 2011001445 A 20100209; PE 2015000636 A 20100209; SG 10201402158V A 20100209; SG 2011054129 A 20100209; UA A201110844 A 20100209; US 201013148659 A 20100209